

OIPE

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/975,723A

DATE: 01/16/2003 TIME: 14:19:52

Input Set : A:\601-1-101N SEQUENCE LISTING.TXT
Output Set: N:\CRF4\01162003\I975723A.raw

4 <110> APPLICANT: Nackman, Gary Foty, Ramsey 7 <120> TITLE OF INVENTION: Improvement of Endothelial Cell-Cell Cohesion 10 <130> FILE REFERENCE: 601-1-101N 12 <140> CURRENT APPLICATION NUMBER: 09/975,723A 13 <141> CURRENT FILING DATE: 2001-10-11 15 <150> PRIOR APPLICATION NUMBER: 60/241,216 16 <151> PRIOR FILING DATE: 2000-10-13 18 <150> PRIOR APPLICATION NUMBER: 60/243,693 19 <151> PRIOR FILING DATE: 2000-10-27 21 <160> NUMBER OF SEQ ID NOS: 2 23 <170> SOFTWARE: FastSEQ for Windows Version 4.0 25 <210> SEQ ID NO: 1 26 <211> LENGTH: 829 27 <212> TYPE: PRT 28 <213> ORGANISM: Homo sapiens 30 <400> SEQUENCE: 1 31 Met Gly Leu Pro Arg Gly Pro Leu Ala Ser Leu Leu Leu Gln Val 32 1 10 33 Cys Trp Leu Gln Cys Ala Ala Ser Glu Pro Cys Arg Ala Val Phe Arg 20 25 35 Glu Ala Glu Val Thr Leu Glu Ala Gly Gly Ala Glu Gln Glu Pro Gly 35 37 Gln Ala Leu Gly Lys Val Phe Met Gly Cys Pro Gly Gln Glu Pro Ala 38 50 55 39 Leu Phe Ser Thr Asp Asn Asp Asp Phe Thr Val Arg Asn Gly Glu Thr 40 65 70 75 41 Val Gln Glu Arg Arg Ser Leu Lys Glu Arg Asn Pro Leu Lys Ile Phe 43 Pro Ser Lys Arg Ile Leu Arg Arg His Lys Arg Asp Trp Val Val Ala 44 100 105 110 45 Pro Ile Ser Val Pro Glu Asn Gly Lys Gly Pro Phe Pro Gln Arg Leu 46 115 120 47 Asn Gln Leu Lys Ser Asn Lys Asp Arg Asp Thr Lys Ile Phe Tyr Ser 130 135 49 Ile Thr Gly Pro Gly Ala Asp Ser Pro Pro Glu Gly Val Phe Ala Val 50 145 150 155 160 51 Glu Lys Glu Thr Gly Trp Leu Leu Leu Asn Lys Pro Leu Asp Arg Glu 52 165 170 53 Glu Ile Ala Lys Tyr Glu Leu Phe Gly His Ala Val Ser Glu Asn Gly 54 180 185

55 Ala Ser Val Glu Asp Pro Met Asn Ile Ser Ile Ile Val Thr Asp Gln

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/975,723A

DATE: 01/16/2003
TIME: 14:19:52

Input Set : A:\601-1-101N SEQUENCE LISTING.TXT
Output Set: N:\CRF4\01162003\I975723A.raw

56			195					200					205			
57 58	Asn	Asp 210	His	Lys	Pro	Lys	Phe 215	Thr	Gln	Asp	Thr	Phe 220	Arg	Gly	Ser	Val
	Leu 225	Glu	Gly	Val	Leu	Pro 230	_	Thr		Val	Met 235	Gln	Val	Thr	Ala	Thr 240
		Glu	Asp	Asp	Ala 245		-	Thr	Tyr	Asn 250	Gly	Val	Val	Ala	Tyr 255	
	Ile	His	Ser	Gln 260	Glu		Lys	_			Asp		Met	Phe 270		Ile
	His	Arg			Gly								Gly 285		Asp	Arg
	Glu	Lys 290			Glu	Tyr	Thr 295		Thr	Ile	Gln	Ala 300		Asp	Met	Asp
69	Gly 305		Gly	Ser	Thr	Thr 310	Thr	Ala			Val 315		Glu	Ile	Leu	Asp 320
71		Asn	Asp	Asn	Ala	Pro	Met			Pro	Gln	_	Tyr	Glu		
	Val	Pro	Glu		325 Ala	Val		His			Gln		Leu		335 Val	Thr
	Asp	Leu	_	340 Ala	Pro	Asn	Ser			_	_			350 Tyr	Leu	Ile
76 77	Met	_	355 Gly	Asp	Asp	Gly	Asp	360 His		Thr			365 Thr	His	Pro	Glu
78 79	Ser	370 Asn	Gln	Glý	Ile	Leu	375 Thr	Thr	Arg	Lys	Gly	380 Leu	Asp	Phe	Glu	Ala
	385 Lvs	Asn	Gln	His	Thr	390 Leu	Tvr	Val	Glu	Val	395 Thr	Asn	Glu	Ala	Pro	400 Phe
82	_				405		-			410					415	
84			-	420	Pro				425					430		
85 86	Asp	Val	Asn 435	Glu	Ala	Pro	Val	Phe 440	Val	Pro	Pro	Ser	Lys 445	Val	Val	Glu
87 88	Val	Gln 450	Glu	Gly	Ile	Pro	Thr 455	Gly	Glu	Pro	Val	Cys 460	Val	Tyr	Thr	Ala
	Glu 465	Asp	Pro	Asp	Lys	Glu 470	Asn	Gln	Lys	Ile	Ser 475	Tyr	Arg	Ile	Leu	Arg 480
91 92	Asp	Pro	Ala	Gly	Trp 485	Leu	Ala	Met	Asp	Pro 490	Asp	Ser	Gly	Gln	Val 495	Thr
93 94	Ala	Val	Gly	Thr 500	Leu	Asp	Arg	Glu	Asp 505	Glu	Gln	Phe	Val	Arg 510	Asn	Asn
	Ile	Tyr	Glu 515		Met	Val	Leu	Ala 520	Met	Asp	Asn	Gly	Ser 525	Pro	Pro	Thr
	Thr	Gly 530		Gly	Thr	Leu	Leu 535		Thr	Leu	Ile	Asp 540		Asn	Asp	His
99	Gly) 545	Pro	Val	Pro	Glu	Pro 550	Arg	Gln	Ile	Thr	Ile 555	Cys	Asn	Gln	Ser	Pro 560
	l Val		g His	s Val	L Leu 565	ı Asr		e Thi	: Asp	Lys 57(s Asp		ı Sei	Pro	His 575	Thr
	Ser	r Pro) Phe	e Glr 580	n Ala		ı Leı	ı Thi	Asp 585	Asp		Asp	o Ile	F Tyr	Tr	Thr

RAW SEQUENCE LISTING DATE: 01/16/2003 PATENT APPLICATION: US/09/975,723A TIME: 14:19:52

Input Set: A:\601-1-101N SEQUENCE LISTING.TXT
Output Set: N:\CRF4\01162003\I975723A.raw

105 Ala Glu Val Asn Glu Glu Gly Asp Thr Val Val Leu Ser Leu Lys Lys 595 600 605 106 107 Phe Leu Lys Gln Asp Thr Tyr Asp Val His Leu Ser Leu Ser Asp His 615 109 Gly Asn Lys Glu Gln Leu Thr Val Ile Arg Ala Thr Val Cys Asp Cys 110 625 630 635 640 111 His Gly His Val Glu Thr Cys Pro Gly Pro Trp Lys Gly Gly Phe Ile 650 112 645 113 Leu Pro Val Leu Gly Ala Val Leu Ala Leu Leu Phe Leu Leu Leu Val 660 665 115 Leu Leu Leu Val Arg Lys Lys Arg Lys Ile Lys Glu Pro Leu Leu 675 680 116 685 117 Leu Pro Glu Asp Asp Thr Arg Asp Asn Val Phe Tyr Tyr Gly Glu Glu 118 690 695 700 119 Gly Gly Glu Glu Asp Gln Asp Tyr Asp Ile Thr Gln Leu His Arg 710 715 121 Gly Leu Glu Ala Arg Pro Glu Val Val Leu Arg Asn Asp Val Ala Pro 122 730 725 735 123 Thr Ile Ile Pro Thr Pro Met Tyr Arg Pro Arg Pro Ala Asn Pro Asp 124 740 745 750 125 Glu Ile Gly Asn Phe Ile Ile Glu Asn Leu Lys Ala Ala Asn Thr Asp 755 760 127 Pro Thr Ala Pro Pro Tyr Asp Thr Leu Leu Val Phe Asp Tyr Glu Gly 770 128 775 129 Ser Gly Ser Asp Ala Ala Ser Leu Ser Ser Leu Thr Ser Ser Ala Ser 130 785 790 795 800 131 Asp Gln Asp Gln Asp Tyr Asp Tyr Leu Asn Glu Trp Gly Ser Arg Phe 132 805 810 815 133 Lys Lys Leu Ala Asp Met Tyr Gly Gly Gly Glu Asp Asp 134 820 825 137 <210> SEQ ID NO: 2 138 <211> LENGTH: 3170 139 <212> TYPE: DNA 140 <213> ORGANISM: Homo sapiens 142 <400> SEQUENCE: 2 143 geggaacace ggeeegeegt egeggeaget getteacece tetetetgea geeatgggge 60 144 teectegtgg acetetegeg teteteetee tteteeaggt ttgetggetg eagtgegegg 120 145 cctccgagcc gtgccgggcg gtcttcaggg aggctgaagt gaccttggag gcgggaggcg 180 146 cggagcagga gcccggccag gcgctgggga aagtattcat gggctgccct gggcaagagc 240 147 cagctctgtt tagcactgat aatgatgact tcactgtgcg gaatggcgag acagtccagg 300 148 aaagaaggtc actgaaggaa aggaatccat tgaagatctt cccatccaaa cgtatcttac 360 149 gaagacacaa gagagattgg gtggttgctc caatatctgt ccctgaaaat ggcaagggtc 420 150 ccttccccca gagactgaat cagctcaagt ctaataaaga tagagacacc aagattttct 480 151 acagcatcac ggggccgggg gcagacagcc cccctgaggg tgtcttcgct gtagagaagg 540 152 agacaggetg gttgttgttg aataageeae tggaeeggga ggagattgee aagtatgage 600 153 tctttggcca cgctgtgtca gagaatggtg cctcagtgga ggaccccatg aacatctcca 660 154 tcatcgtgac cgaccagaat gaccacaagc ccaagtttac ccaggacacc ttccgaggga 720 155 gtgtcttaga gggagtccta ccaggtactt ctgtgatgca ggtgacagcc acagatgagg 780 156 atgatgccat ctacacctac aatggggtgg ttgcttactc catccatagc caagaaccaa 840

RAW SEQUENCE LISTING

DATE: 01/16/2003 PATENT APPLICATION: US/09/975,723A TIME: 14:19:52

Input Set : A:\601-1-101N SEQUENCE LISTING.TXT

Output Set: N:\CRF4\01162003\I975723A.raw

157	aggacccaca	cgacctcatg	ttcacaattc	accggagcac	aggcaccatc	agcgtcatct	900
		ggaccgggaa					
159	tggatgggga	cggctccacc	accacggcag	tggcagtagt	ggagatcctt	gatgccaatg	1020
160	acaatgctcc	catgtttgac	ccccagaagt	acgaggccca	tgtgcctgag	aatgcagtgg	1080
161	gccatgaggt	gcagaggctg	acggtcactg	atctggacgc	ccccaactca	ccagcgtggc	1140
162	gtgccaccta	ccttatcatg	ggcggtgacg	acggggacca	ttttaccatc	accacccacc	1200
163	ctgagagcaa	ccagggcatc	ctgacaacca	ggaagggttt	ggattttgag	gccaaaaacc	1260
164	agcacaccct	gtacgttgaa	gtgaccaacg	aggccccttt	tgtgctgaag	ctcccaacct	1320
165	ccacagccac	catagtggtc	cacgtggagg	atgtgaatga	ggcacctgtg	tttgtcccac	1380
166	cctccaaagt	cgttgaggtc	caggagggca	tccccactgg	ggagcctgtg	tgtgtctaca	1440
167	ctgcagaaga	ccctgacaag	gagaatcaaa	agatcagcta	ccgcatcctg	agagacccag	1500
168	cagggtggct	agccatggac	ccagacagtg	ggcaggtcac	agctgtgggc	accctcgacc	1560
169	gtgaggatga	gcagtttgtg	aggaacaaca	tctatgaagt	catggtcttg	gccatggaca	1620
170	atggaagccc	tcccaccact	ggcacgggaa	cccttctgct	aacactgatt	gatgtcaacg	1680
171	accatggccc	agtccctgag	ccccgtcaga	tcaccatctg	caaccaaagc	cctgtgcgcc	1740
172	acgtgctgaa	catcacggac	aaggacctgt	ctcccacac	ctcccctttc	caggcccagc	1800
173	tcacagatga	ctcagacatc	tactggacgg	cagaggtcaa	cgaggaaggt	gacacagtgg	1860
174	tcttgtccct	gaagaagttc	ctgaagcagg	atacatatga	cgtgcacctt	tctctgtctg	1920
175	accatggcaa	caaagagcag	ctgacggtga	tcagggccac	tgtgtgcgac	tgccatggcc	1980
176	atgtcgaaac	ctgccctgga	ccctggaaag	gaggtttcat	cctccctgtg	ctgggggctg	2040
177	tcctggctct	gctgttcctc	ctgctggtgc	tgcttttgtt	ggtgagaaag	aagcggaaga	2100
178	tcaaggagcc	cctcctactc	ccagaagatg	acacccgtga	caacgtcttc	tactatggcg	2160
179	aagaggggg	tggcgaagag	gaccaggact	atgacatcac	ccagctccac	cgaggtctgg	2220
180	aggccaggcc	ggaggtggtt	ctccgcaatg	acgtggcacc	aaccatcatc	ccgacaccca	2280
181	tgtaccgtcc	taggccagcc	aacccagatg	aaatcggcaa	ctttataatt	gagaacctga	2340
182	aggcggctaa	cacagacccc	acagccccgc	cctacgacac	cctcttggtg	ttcgactatg	2400
183	agggcagcgg	ctccgacgcc	gcgtccctga	gctccctcac	ctcctccgcc	tccgaccaag	2460
184	accaagatta	cgattatctg	aacgagtggg	gcagccgctt	caagaagctg	gcagacatgt	2520
185	acggtggcgg	ggaggacgac	taggcggcct	gcctgcaggg	ctggggacca	aacgtcaggc	2580
186	cacagagcat	ctccaagggg	tctcagttcc	cccttcagct	gaggacttcg	gagcttgtca	2640
187	ggaagtggcc	gtagcaactt	ggcggagaca	ggctatgagt	ctgacgttag	agtggttgct	2700
188	tccttagcct	ttcaggatgg	aggaatgtgg	gcagtttgac	ttcagcactg	aaaacctctc	2760
189	cacctgggcc	agggttgcct	cagaggccaa	gtttccagaa	gcctcttacc	tgccgtaaaa	2820
190	tgctcaaccc	tgtgtcctgg	gcctgggcct	gctgtgactg	acctacagtg	gactttctct	2880
191	ctggaatgga	accttcttag	gcctcctggt	gcaacttaat	tttttttt	aatgctatct	2940
		agagaaagtt					
		ctggtttcca					
		tgcctaggtt					
	<u>-</u>	acaatcgtgt					3170

VERIFICATION SUMMARY

DATE: 01/16/2003

PATENT APPLICATION: US/09/975,723A

TIME: 14:19:53 .

Input Set: A:\601-1-101N SEQUENCE LISTING.TXT Output Set: N:\CRF4\01162003\I975723A.raw